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GLOSSARY

TO

SAY'S

ENTOMOLOGY.

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EXPLANATION

OF

TERMS USED IN ENTOMOLOGY.

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A.

Abbreviated, shortened, not extending to the extremity of a given part; (elytra) shorter than the abdomen.

Abdomen, the posterior portion of the body, divided into *segments* or rings, by sutures or *incisures;* including the viscera, genitals, &c., and composed of *tergum*, *venter*, *stigmata*, and *anus*.

Abrupt, terminating suddenly, not drawn out to a point.

Acetabuliform, like a circular shallow saucer, the sides of which are more or less incurved. See *calathiform*.

Acetabulum, that segment of the *postpectus* that is situated behind the *peristaethium*; it is bounded each side by the *parapleuræ*, and behind by the *mærianæ;* it contains cavities before for the insertion of the intermediate feet.

Acicular, needle-shaped; approaching *subulate*, but more slender, with a more delicate and pungent point; closely allied to *acerose*.

Acinaciform, cimitar-shaped; sabre-shaped; one thick and straight edge, the other thin and curved.

Acini, granulations.

Aculeate, prickly; furnished with, or ending in, prickles; armed with small sharp points.

Aculeate-serrate, armed with numerous short spines or prickles inclining towards one end.

Aculei, prickles; small sharp points.

Aculeus, the instrument and appendages with which the female lays her eggs; the *oviduct* or sting; an elongated dart, often poisonous, seated in the extremity of the *abdomen*; it is compound, having two or more darts; exserted, projecting; re-

condite, concealed; retractile, capable of being withdrawn; simple, having but one point; or vaginate, inclosed in a bivalve sheath; it is composed of *valvæ*, *vagina*, and *spicula*.

Acuminated, tapering to a point; a point lengthened out.

Acute, sharp pointed.

Adnate, connected; adhering or growing together; adjoining; (abdomen) attached to the thorax without the intervention of a *petiole*.

Adpressed, contiguous; pressed to, or laid to.

Æquata, *equal*.

Æroscepsin, a supposed unknown sense, of which the antennæ are, by some, believed to be the organs.

Æruginous, the colour of verdegrise; light bluish-green.

Alæ, wings.

Alated, winged; furnished with wings, or with projecting bodies somewhat like wings.

Albidus, a dusky white.

Albus, white.

Alternate, so placed that between two on one side, there is but one on the opposite side; or a series of spots on the chequer-board would be said to be alternately black, or alternately white. See *opposite*.

Alveolate, furnished with cells.

Alveole, a cell like that of a honeycomb.

Ambulatory, formed for walking. See *saltatory*, *cursory*.

Anal angle, the inner posterior angle of the inferior wings of the Lepidoptera.

Anastomosing, inosculating, or running into each other like veins.

Anastomosis, a spot in the upper wing, at the branching of the *nervures*, near the costal edge; the *stigma;* in general this word is used to indicate the connection of any two nervures of the wing, by means of a transverse nervure.

Anceps, two-edged, very similar to *ensiform*.

Ancipital, having two opposite edges or angles.

Annulata, or *annulosa*, one of the four great types into which Cuvier divides the animal kingdom; it consists of those animals whose bodies are more or less divided transversely into segments. It includes the classes Crustacea, Myriapoda, Arachnides, Insecta, and Vermes.

Annulate, or *annulated*, furnished with coloured rings; marked with differently coloured annulations.

Annulus, a ring; the circumference of the *gula* in which the *lora* terminates; a term applied to coloured rings upon the

body or members, differing from a *band*, by being continued quite round.

Antennæ, two *articulated* organs of sensation, situated on the head; in the hymenoptera particularly, they are divided into *radicula*, *scapus*, *pedicellus*, and *apex*; they are *moniliform*, *setaceous*, *clavate*, &c.

Anterior angle, of the thorax, is the lateral angle near the head on each side.

Anterior margin, the margin on the anterior side of the wings, extending from the *base* to the *apex*; the *costal margin*; opposite to the *posterior margin*.

Anterior palpi, the *labial palpi*.

Anterior wings, the *superior wings*.

Antipenultimate, the last but two.

Anus, the apex of the *abdomen*, in which the organs of generation in most insects are attached or concealed; including *fimbria*, *aculeus*, and *penis*.

Apex, in general indicates the terminal portion of any organ or part of the body; (of the wing) it is that part or angle which is opposed to, or at the greatest distance from, the *base*; (ligula) the portion which is not included in the *tubus*; (maxillæ) that portion which is above the *palpus*.

Apiculate, covered with fleshy, erect, short points. See *verrucose*.

Apodal, (larvæ) with simple tubercles instead of feet. See *geometræ*.

Apophysis, the *coxæ*; the two small basal joints of the feet. See *trochanter* and *flocculus*.

Approaching, *converging*.

Approximate, near to, near together; (antennæ) close together at base.

Aptera, insects without wings; many of the Coleoptera are destitute of wings, and in most of such species the *elytra* are inseparable: the females of several species of the Lepidoptera are also destitute of wings; as are also some of the Hymenoptera.

Arachnoideous, cobweb-like; resembling a cobweb.

Arcuated, or *arquated*, bowed.

Areæ, or *Areolæ*, wing cells; the membranaceous spaces between the *nervures*; the *cellules*.

Aristate, or *setarious*, (antennæ) furnished with a hair, which arises from the superior, lateral, or terminal portion of the terminal joint, as in the common house-fly. See *clavate*, *lamellate*.

Articulate, divided into distinct joints.

Articulation, joint; this word is generally used to denote the space between two joints; articulations are *apparent*, when their distinction is obvious, and *obsolete*, when their separations are not, or hardly visible. The Coleoptera have generally eleven articulatious to each antenna, the Hemiptera four to six, the Hymenoptera commonly thirteen in the males and twelve in the females.

Artus, the *members;* the instruments of motion, *wings*, *feet*, &c.

Asperous, rugged; with very distinct elevated dots, more uneven than *scabrous*.

Assurgent, rising; declining at the base, and rising in a curved manner to an erect posture.

Ater, the deepest black.

Atomus, a minute dot or point.

Atropurpureus, dark purplish, almost black.

Atrovirens, dark green, approaching blackish.

Attenuated, growing slender; tapering.

Aurantiacus, orange colour; a mixture of yellow and red. See *fulvous*.

Aurelia, that state of the imperfect insect which succeeds the *larva;* the *chrysalis* or quiescent state of transformation of an insect, in which it is often inclosed in a separate hard *cocoon* or *follicle*. See *nympha*, *pupa*.

Aureus, golden-yellow.

Auricle, or *auricula*, an appendage resembling a little ear; a short membranaceous process, placed laterally on the tongue, it is peculiar to the family Andrenidæ; they are distinguished from the *laciniæ interiores* of the Apidæ by being usually serrate at tip; they are the "petites parties en forme de barbillons" of Degeer; a depressed, lateral, rounded lobe of the thorax.

Axillary, placed in the crotch or angle of the origin of two bodies; arising from the angles of ramification.

Azure, azure-blue; nearly the same as *cæruleus*, but more like ultramarine.

B.

Badius, chesnut or liver brown.

Barb, a kind of spine armed with teeth pointing backwards.

Barbated, or *bearded*, (antennæ) having tufts or fascicles of hair at the articulations; (abdomen) tufted with hair at the sides or tip.

Basal, or *basilar*, relating to the base.

Base, (of the wing or elytra) that part which is attached to the thorax; (of the thorax) that part which is nearest to the elytra; (of the abdomen) the part nearest to the *metathorax;* (of the tongue) the portion included in the *tubus;* (of the maxillæ) the part below the *palpus*, including *cardo* and *pecten.*

Bearded, *barbated.*

Bicaudate, having two tails or processes; this term is generally applied to the posterior wings of Lepidoptera when thus formed.

Bicornute, two-horned.

Bicuspidate, ending in two points.

Bifarious, pointing in opposite directions.

Bifid, cleft; cloven in two. See *emarginate*, *furcate*, *biparted.*

Bijugum, in two pairs.

Bilamellar, divided into two laminæ.

Bilobate, divided into two lobes.

Bilocular, having two cells or compartments.

Binate, in pairs; consisting of a single pair.

Biparted, profoundly divided into two parts. See *bifid.*

Bipupillate, an ocellate spot having two pupils or dots within it, of a different colour.

Biradiate, consisting of two rays.

Bisetous, furnished with two setaceous appendages.

Bivalve, (proboscis) consisting of two valves or divisions, united so as to form a tube.

Blind, or *subocellate*, applied to an eye-like spot which is destitute of the central spot or pupil.

Body, includes every part of an insect, and is divided into *head*, *thorax*, and *abdomen.*

Boreal, of or belonging to the north.

Botryoidal, clustered like a bunch of grapes.

Brachial nervures, those nervures of the anterior wing that originate at the thorax, and run somewhat parallel with the *interior edge* towards the *posterior angle* or *posterior edge*, often connected with the *cubital cellules* by means of the *recurrent nervures.*

Bronze, the colour of old brass.

Brunneus, pure very dark brown.

Bullate, blistered.

C.

Caducus, shedding; easily and quickly falling off.

Cæruleus, colour of the sky; sky-blue.

Cæsius, pale blue, approaching gray.

Calathiform, bowl-shaped; hemispherical and concave. See *crateriform*, *proculiform*.

Calcarate, having a spur.

Calyculate, double-cupped; one cup placed within another.

Campanulate, bell-shaped; more or less ventricose at the base, and a little recurved at the margin.

Canaliculate, channelled; excavated longitudinally, with a concave line in the middle.

Cancellate, or *cancelled*, cross-barred; latticed; having longitudinal lines or grooves decussate by transverse ones.

Canus, hoary, with more white than gray.

Capillary, hair-like; long and slender like a hair. See *filiform*.

Capitate, having a head; terminating in a little head or knob; it differs from *clavate* by a more abrupt enlargement.

Capitulum, the dilated or labiated termination of a *proboscis*; the enlarged tip of the *halteres*.

Caput, the *head*.

Cardo, or *cardines*, in Hymenoptera, is a transverse corneous body, situated between the base of the *maxillæ* and the *lora*; they are mentioned by Swammerdam as organs, by which, in conjunction with the *fulcrum*, the *proboscis* is united to the head.

Carina, a keel.

Carinate, keeled; resembling a keel; having a longitudinal prominence like the keel of a boat.

Carious, corroded, or having the appearance of being worm-eaten.

Carneous, flesh-coloured.

Carpus, or *punctum*, is at the extremity of the *radius* and cubitus of the anterior wing; this is the joint in the wing of some insects by means of which it is folded transversely; it has been called *stigma* in the Neuroptera, and is often opake.

Cartilaginous, of the consistence of cartilage or gristle.

Caruncle, a soft, naked, fleshy excrescence.

Cataphracted, invested with a hard callous skin, or with scales closely united.

Caterpillar, the *larva* or *eruca*.

Cauda, the tail; the posterior and terminal part of the *abdomen*; an appendage of any kind terminating the abdomen is usually called by this name. See *anus*.

Caudate, generally applied to the posterior wings of Lepidoptera, to indicate tail-like projections or processes.

Caudulæ, tailets; little tails.

Cellule, a portion of the *wing* included between *nervures*. See *radial cellule*.

Cernuous, bent; the apex bent downward. See *nutant*.

Cespitose, matted together.

Cheek, the *gena;* a portion of the head beneath the eyes on each side.

Chela, the terminal portion of a foot, which has a moveable lateral toe like the claw of a crab.

Chrysalis, the second state of the insect from the egg; particularly the second state of Lepidopterous insects, of which *caterpillar* or *eruca* is the first; the *pupa*.

Cicatrix, a scar; an elevated, rigid spot.

Ciliate, fringed; set with parallel hairs, bristles, &c.

Cinereous, ash-colour; gray tinged a little with blackish; the colour of wood ashes.

Cingula, a coloured band.

Circinal, spirally rolled inwards and downwards, as in the *lingua* of Lepidoptera.

Class, one of the principal divisions in a system or arrangement of natural bodies.

Clavate, club-shaped; gradually becoming thicker towards the end. See *capitate*.

Claw, the *unguis*.

Clypeus, the superior portion of the head in Coleopterous insects.

Coadunate, joined together at base; two or more joined together; (elytra) permanently united at the suture.

Coarctate, contracted; compact; opposed to effuse; (*metamorphose*) that species of change in which the pupa assumes a cylindrical shape, all the members of the body being concealed as in the family of Hippoboscæ. See *incomplete*, *semicomplete*.

Cocardes, retractile vesicular bodies on each side of the *stethidium* of insects of the genus Malachius.

Coccineous, the colour of the blossom of the saffron.

Cochleate, twisted spirally like a screw, or a univalve shell.

Cocoon, a *follicle*.

Coenogonous, oviparous at one season of the year, and ovoviviparous at another, as the Aphides.

Coleoptera, the first order of insects, having coriaceous elytra, not lapped one over the other at tip; coriaceous elytra.

Collar, the *collum*.

Collare, the somewhat elevated posterior part of the *collum*.

Collum, the neck or collar; the anterior segment of the *trunk*

in such insects as have that part of the body divided into several pieces, as in the Hymenoptera, Lepidoptera, &c.; in reality it corresponds with the *thorax* of the Coleoptera, &c. See *collare*.

Columnar, differs from *cylindric*, by tapering towards one end, like the shaft of a column.

Comose, ending in a tuft, or a kind of brush. See *plumose*.

Compressed, flattened laterally; the transverse diameter much shorter than the vertical diameter. See *depressed*.

Concolores, applied to the wings of Lepidopterous insects when their superior and inferior surfaces are of the same colour.

Conduplicate, doubled, or folded together.

Confert, crowded, clustered; opposed to *sparse*.

Confluent, running into one another.

Congested, heaped together.

Conglomerate, congregated.

Conjugate, consisting of a single pair.

Connate, united at base.

Connivent, converging or approaching; closing.

Contiguous, touching; placed so near as to touch. See *approximate*.

Contorted, twisted; incumbent upon each other in an oblique direction.

Convolute, rolled or twisted spirally; (wings) wrapping around the body, the outer surface being convex. See *revolute*, *involute*.

Converging, approaching each other towards the tip; *connivent*.

Corbicula, in many species of Hymenoptera, is a fringe of hairs on the posterior tibia, arising from the margins of the limb only. See *scopa*.

Cordate, heart-shaped; it is not absolutely necessary that an emargination should exist on the anterior part, but it requires that the object be somewhat triangular with the corners of the base rounded.

Coriaceous, leather-like; thick, tough, and somewhat rigid.

Corneous, of a horny substance; resembling horn.

Corniform, horn-shaped; long, mucronate, or pointed.

Cornutus, horn-shaped.

Corona, a crown-like appearance.

Corpus, the *body*.

Corrugated, wrinkled.

Costa, the thickened *anterior margin* of a wing, between the *base* and *apex*. See *stigma*.

Costal-margin, the anterior margin of a wing.

Costate, ribbed; marked with elevated thickened lines.
Coxæ, the two-jointed base of the feet; the *apophysis*, consisting of the *patella* and *trochanter*.
Crateriform, somewhat like *calathiform*, but not so much inflated, and rather approaching to *infundibuliform*. See *urceolate*.
Crenate, scolloped; differs from *serrate* and *dentate* in having rounded teeth, not directed towards either end.
Cruciate, cross-shaped; having the shape of a cross; (wings) incumbent, but the inner margins lay one over the other.
Crustaceous, somewhat hard, elastic, resisting the pressure of the finger.
Cubital-cellule, a portion of the *superior wing*, included between the nervure of the *radial cellule* and a *nervure* which originates near the extremity of the *cubitus*, and runs in a curvilinear direction towards the extremity of the wing; it is *complete* if this nervure reaches the *posterior edge*, and *incomplete* if the nervure is abbreviated; it is often divided into two or three parts by transverse nervures; when one of these parts or small cellules appears to be supported by a petiole it is termed a *petiolated cellule;* it is called *submarginal cellule* by some authors.
Cubitus, the second nervure of the *exterior* margin of the wing, extending from the base to the *carpus*; it is separated from the *radius* by an intermediate membrane.
Cucullate, cone-shaped; hooded.
Cultrate, shaped like a pruning-knife.
Cuneiform, wedge-shaped; broad and truncated at one end, and attenuated to the other.
Cupreous, coppery; the colour of copper.
Cuspidate, prickly-pointed; ending in a sharp point; an acuminated point ending in a bristle. See *mucronate*.
Cursory, formed for running. See *natatory*.
Cyathiform, wineglass-shaped; more or less obconical and concave. See *calathiform*, *acetabuliform*.
Cyaneus, dark-blue, like prussian-blue.
Cydariform, globose, but truncated at two opposite sides.
Cymbiform, boat-shaped; *navicular*.

D.

Deciduous, falling off easily. See *caducus*.
Decrepitant, crackling.
Decumbent, bending down; upright at base, and bending down at tip. See *procumbent*.

Decurrent, closely attached to, and running down another body.
Decurved, bowed downwards. See *excurved*.
Decussated, in cross-pairs; pairs alternately crossing each other.
Deflected, bent downwards; (wings) incumbent but not horizontally, the outer edges declining towards the sides.
Dehiscent, gaping; open or standing open; deeply emarginate.
Deltoid, triangular spear-shaped; trowel-shaped; having the general appearance of a triangle, with the terminal angle much further from the base than the lateral ones.
Dendroid, shrub-like; having the appearance of a little tree.
Dentate, toothed; with acute teeth, the sides of which are equal, the tip being opposite to the middle of the base. See *serrate*.
Dentate-serrate, tooth-serrated; the denticulations being themselves serrated on their edges.
Dentate-sinuate, toothed and indented.
Denticulated, set with little teeth or notches.
Denuded, or *denudated*, destitute of covering; (wings) without scales or hair.
Dependent, hanging down.
Depressed, pressed downward; more or less flattened vertically; the vertical diameter much shorter than the transverse diameter. See *compressed*.
Detonant, exploding; emitting a sudden noise.
Diaphanous, semitransparent; clear.
Dichotomous, forked; dividing by pairs.
Diffracted, bending in different directions.
Diffuse, spreading.
Digitate, finger-like; divided like fingers nearly to the base.
Digitus, the terminal joints of the *tarsus* and *manus*, divided into *unguis* and *pulvillus*.
Dimidiatus, half round; extending half way round; (elytra) covering but half the tergum.
Dioptrate, applied to an ocellate spot, of which the pupil is divided by a transverse line.
Diptera, that order of insects comprehending those that have only two wings.
Disk, the surface within the margin.
Dislocated, applied to designate a stria or line which is *interrupted* in its continuity, but of which the tips at the interrupted parts are not in a right line with each other.
Dissilient, bursting open elastically.
Distinct, (antennæ) not united at base.
Divaricate, straddling; spreading out; (wings) incumbent, but diverging behind.

Diverging, spreading out widely, so as to form nearly a right angle.

Dolabriform, hatchet-shaped; compressed, with a very prominent dilated keel and cylindrical base. See *securiform*.

Dorsal, of the back.

Dorsum, the posterior portion of the *stethidium* on the superior surface of the body, directly above the *postpectus*, and bounded behind by the *tergum*; in the Coleoptera it is covered by the basal portion of the elytra.

Duplicate, doubled.

E.

Ecalcarate, without a spur or horn.

Echinate, set with prickles.

Edentulous, destitute of teeth.

Edge, of a surface, is that line which includes the *margin*, and forms the extreme boundary; the elytra of many Coleoptera have a deflected margin beneath the edge called *epipleura*.

Eflected, bent outwards somewhat angularly.

Egg, the first state of the insect.

Eliptical, elongate-oval; differs from oval by having the lines nearly parallel in the middle.

Elytra, coriaceous, opake, more or less solid lamellæ, separated in repose by a rectilinear *suture*, substituted for the anterior wings and covering the *dorsum* and *tergum* in repose; including, *base*, *tip*, *humerus*, and *epipleura*. See *hemelytra*.

Emarginate, notched; terminating in an acute notch at tip. See *sinuate*.

Ensiform, sword-shaped; two-edged, large at base, and tapering towards the point. See *ancipital*.

Entire, (wings) with a simple margin; not indented on the edge.

Epupillate, an ocellate spot included by a coloured ring, but destitute of a pupil or central dot.

Epipleura, the deflexed or inflexed margin of the elytra, immediately beneath the edge.

Equal, superfices without inequalities, not canaliculated, striated, punctured, &c; this term differs from *plane* in not requiring the part to be level or in a rectilinear direction, but occurs in round bodies; also applied to bodies of the same length.

Equitant, folded one upon the other; laminated.

Erect, upright; nearly but not absolutely perpendicular to the horizon. See *vertical*.

Eroded, gnawed; as if worm-eaten; (edge) with irregular teeth and emarginations.

Eruca, the state of Lepidopterous insects succeeding the egg; caterpillar; larva.
Escutcheon, the scutel.
Essential character, a peculiar trait, distinguishing the genus or species from all others.
Exaratus, sulcated.
Exarticulate, having no distinct joints.
Excaudate, or *ecaudate*, (wings) destitute of tail-like processes.
Excurved, curved outwards.
Explanate, spread out; flat.
Exscutellate, having no scutel.
Exserted, protruded; opposed to inclosed; (aculeus) projecting, not concealed within the body.
Extended, (wings) not lying one upon the other.
Exterior edge, or *anterior edge*, of the wings; it extends from the *base* to the *apex*.
Exterior margin, (wing) the anterior margin, from the base to the apex.
Exterior palpi, the *maxillary palpi*.
Exuvia, the cast-off skin, the rejected covering. See *vernantia*.
Eyes, organs of sight, composed of very numerous hexagonal lenses; all insects have two eyes besides the *stemmata*.

F.

Face, or *facies*, the anterior and superior portion of the head; including *vertex*, *stemmata*, *eyes*, *front*, and *nasus*.
Falcate, shaped like a sickle; convexly curved before and concave behind.
Farctus, filled full.
Fascia, a transverse band or broad line; a fascia is said to be *common*, when it passes over both the superior and inferior wings, as in many species of Lepidoptera, or when it passes across the two elytra in Coleoptera. See *striga*.
Fasciated, banded.
Fascicle, a bundle.
Fasciculate, bundled; clustered as in a bundle; tufted.
Fastigiate, flat-topped; of an equal height.
Fatiscent, spontaneously mouldering and falling to pieces in the air.
Favose, honeycomb-like; with large deep holes like the cells of a honeycomb. See *scrobiculate*.
Feelers, the palpi.
Feet, six organs of motion situated beneath the body; consisting of *apophysis*, *femur*, *tibia*, *manus*, *tarsus*, *plantus*, and *palma*.

Femur, the *thigh*, or third joint of the feet.

Fenestrate, applied to the naked hyaline spots on the wings of many of the Lepidoptera.

Ferruginous, the colour of the oxide of iron; brown approaching yellow.

Filate, (antennæ) simple, without a lateral hair or dilatation; this word is used in the order Diptera.

Filiform, thread-shaped; slender and of equal thickness. See *setaceous*, *clavate*.

Filose, ending in a thread-like process.

Fimbria, thick ciliated hairs at the termination of the abdomen; conspicuous in the genus Andrena. See *scopa*, *flocculus*.

Fimbriated, fringed.

Fissile, cloven; divided into parallel lamellæ, as in the antennæ of Scarabæus, and the wings of the Alucitadæ. See *lamellate*.

Fissure, a crevice; a narrow solution of continuity.

Fistular, hollow; applied to a hollow cylinder.

Flabelliform, fan-shaped.

Flaccid, limber; feeble; lax.

Flagellum, the terminal portion of the antennæ situated beyond the *pedicellus*; the *apex*.

Flavo-virens, green verging upon yellow.

Flexuous, zig-zag without acute angles; seems to differ from *undulated* in being alternately bent and nearly straight.

Flocculus, a hairy or bristly appendage of the posterior *apophysis* in a few of the Hymenoptera. See *fimbria*.

Fluviatile, inhabiting rivers, as the larvæ of many insects.

Foliaceous, resembling a leaf.

Follicle, a *cocoon*; the covering formed by the *larva* for protection in its *pupa* state.

Forceps, two or more hooks or processes, sometimes branched on the inner side, with which the male grasps the anus of the female; they constitute a part of the *penis*.

Forcipated, formed somewhat like a pair of pincers.

Fornicate, arched or vaulted.

Fossula, a sinus; a small hollow; *foveola* and *scrobiculus* have nearly the same meaning.

Foveolate, covered superficially with cavities like a honeycomb.

Fragile, brittle, easily broken.

Front, anterior portion of the head, included by the *eyes*, *vertex*, and *nasus*, and supporting the *antennæ*; (Diptera) that portion of the head which is above the antennæ and between the eyes, its superior portion is called the *vertex*.

Fulcrum, the corneous body on which the base of the *tubus*, or sheath of the tongue, in the Hymenoptera, rests; it is "le pivot" of Reaumur.
Fuliginous, sooty; of the colour of soot.
Fulvous, orange-yellow.
Furcated, forked; terminating in two divisions.
Fuscus, dark brown, with a slight mixture of gray.
Fusiform, spindle-shaped; gradually tapering more or less to each end.

G.

Galea, helmet; a dilated inarticulate membranaceous piece on each *maxilla*, that, together with the *labrum*, covers the organs of the mouth in the Orthoptera and some of the Neuroptera.
Gastric, of or belonging to the belly.
Gelatinous, jelly-like; having the consistence of jelly.
Geminate, situated in pairs.
Gena, cheek; a portion of the head on each side immediately beneath the eye, often turgid.
Geniculate, knee-jointed; bending abruptly in an obtuse angle.
Genus, an assemblage of *species* which correspond in particular characters.
Geometræ, larvæ which when walking alternately elevate and straighten the middle of the body, as in those of the genus *Geometra;* opposed to *rectigrade.*
Gibbous, hump-backed; protuberant.
Glabrous, smooth; opposed to *hairy*, *downy*, *villous*, &c.
Glaucous, gray-bluish-green.
Globular, like a round ball; all the diameters equal.
Glochis, a barbed point.
Glomerate, congregated.
Glutinous, slimy, viscid.
Gracile, slender.
Granulated, covered with small grains.
Gregarious, living in society, as many of the larvæ of Lepidoptera that fabricate a common web.
Griseus, light gray.
Grub, the larva; generally applied to the immature Scarabæus.
Gula, concave portion beneath the head, between the base of the *mentum* and the *jugulum.*
Gymnopteræ, membranaceous and transparent wings without scales.

H.

Habit, or *habitus*, the port or aspect; used comparatively to express a resemblance in general appearance, apart from more important markings derived from organization.

Habitation, or *habitat*, a situation or locality frequented by insects.

Halteres, the *poisers*, capitate moveable filaments, in the Diptera, situated one on each side of the thorax, substituted for the inferior wings, and often covered by the *scale;* they are said to be *naked* when destitute of the scale.

Hamuli, minute hooks in Hymenoptera, situated on the anterior margin of the under wing, they lay hold of the hind margin of the upper wing.

Hamus, a hooked process, covered with scales, situated under the upper wings near the base, in the males of many of the Lepidoptera, receiving a bristle (*tendo*) from the lower wing; the *hamus* is never present in females.

Hand, the *manus*.

Hastate, halbert-shaped; resembling the head of a halbert; excavated at the base and sides, but with spreading lobes or angles.

Haustellum, the sucker; it is formed by the assemblage of inflexible setæ, and inclosed in a *rostellum* or *proboscis*. See *lingula*.

Head, the anterior portion of the body, connected at base with the anterior portion of the *stethidium;* it includes *occiput*, *face*, *gena*, *mouth*, *gula*, *jugulum*, and *antennæ*.

Heels, the *spinulæ*.

Hemelytra, scales, generally coriaceous at base, and membranaceous at tip, not divided by a straight suture, and substituted for the anterior wings, as in the Orthoptera and Hemiptera. See *tegmina*.

Hemispheric, convex above and flat below, like the half of a globe.

Hepatic, liver-brown.

Hexapode, having six feet, as in all true insects.

Hirsute, rough with strong hairs; shaggy. See *pilous*, *villous*, *tomentous*.

Hispid, bristly; rough with stiff, short, sparse hairs. See *strigose*.

Hoary, covered with a fine white silvery substance or pubescence. See *pruinous*.

Homotene, retaining the primitive form; referring to those arti-

culated animals with feet, that do not change their form with their *vernantia*.

Horizontal, (wings) when at rest parallel to the horizon.

Horns, a word used by some writers to designate the antennæ.

Humerus, the region of the exterior basal angle of the elytra; according to Meigen it is the anterior angles of the thorax in Diptera.

Hyaline, transparent; vitreous.

Hymenoptera, an order of insects, comprehending those with four membranaceous naked wings, as the bees and wasps.

Hypocrateriform, salver-shaped.

Hypostoma, that portion of a Dipterous insect which is included between the antennæ, the eyes and the mouth; called by some naturalists *clypeus*.

I.

Imago, the perfect insect, after having passed through the states of *larva* and *pupa*.

Imbricate, tiled; placed one over another like shingles on the roof of a house.

Immaculate, destitute of spots.

Immarginate, having no elevated margin or rim.

Imperfect, or *incomplete metamorphose*, is that species of change from the *larva* to the *imago*, in which the feet and wings of the *pupa* are immoveable, as in the Coleoptera, Lepidoptera, &c.

Incanus, hoary.

Incisure, or suture of the abdomen, is an impressed transverse line, marking the juncture of two *segments*.

Inclining, leaning.

Inconspicuous, not readily discernible. See *obsolete*.

Incrassated, thickened, swelled out at some particular part.

Incumbent, resting against; one lying over the other; (wings) which, when the insect is at rest, cover the back of the abdomen horizontally.

Incurved, bowed inwards. See *recurved*.

Indurated, hardened.

Inequal, unequal; with irregular elevations and depressions on the surface.

Inferior wings, those that are farthest from the head, otherwise called *posterior wings;* they are generally smaller than the *superior* or *anterior* wings; many are provided with *hamuli*.

Inflected, bent inwards at an angle.

Infracted, bent inwards abruptly, as if broken.

Infundibuliform, funnel-shaped.
Inner margin, or *interior margin*, of the wings, is that margin which extends from the *base* to the *posterior angle*.
Institia, a stria of equal breadth throughout.
Instrumenta cibaria, the *trophi;* parts of the mouth taken collectively.
Interior edge, or *inner edge*, the boundary of the *inner margin*.
Interior palpi, the *labial palpi*.
Interrupted, broken in its continuity; but the tips of the broken parts are in a right line with each other. See *dislocated*.
Interstitial line, the longitudinal space which intervenes between two *striæ* of the elytra.
Intorted, turned or twisted inwards.
Invertebral, those animals which are destitute of the vertebral column.
Involute, rolled inwards spirally.
Iris, of an ocellate wing spot, is a circle which surrounds the *pupil*.
Irregular, (antennæ) articulations strikingly unequal either in magnitude or order.
Irrorate, marked with minute points; dew-like.

J.

Joint, *articulation;* this word is applied to the space between two incisures, as the divisions of the antennæ.
Jugulum, that cavity of the posterior part of the head to which the neck is annexed.

K.

Keel, the *carina*.

L.

Labial palpi, articulated filaments, one on each side of the *labium;* the *interior* or *anterior palpi*.
Labiated, having lips.
Labium, lower lip; composed of the *mentum*, and *ligula* or tongue; it supports the *labial palpi*.
Labrum, upper lip; the superior member of the *trophi;* it is generally moveable, and applied to or placed immediately beneath the *nasus*, and above the *mandibles;* it is sometimes entirely concealed; it is the labium of some authors.
Lacerated, ragged; torn.
Laciniæ exteriores, (in the family Apidæ,) two elongated, flattened or concave, biarticulate valves, situated on the tongue

and near their tip supporting the *labial palpi;* they are distinguished from those palpi by being flat instead of cylindrical.

Laciniæ interiores, (in the family Apidæ,) two inarticulate, membranaceous valves, which embrace the tongue at its entrance into the *tube.*

Laciniated, jagged; cut into irregular segments.

Lactescent, yielding or secreting a milky fluid.

Lacteus, of a shining white or milky colour.

Lacunose, pitted; having the surface covered with small cavities. See *favose.*

Lamella, a thin plate or foliation.

Lamellated, (antennæ) divided laterally into distinct plates or foliations. See *fissile*, *setaceous*, &c.

Lanate, woolly; covered with dense, fine, long, white hairs, so distinct that they may be separated. See *tomentose.*

Lanceolate, lance or spear-shaped; oblong and tapering to the end.

Larva, the first state of an insect subsequent to the egg; it is known by the names maggot, grub, caterpillar, &c.; it is slow, sterile, and voracious; the old authors called it *eruca.*

Lateral, situated on the side.

Lateritious, brick-colour; like *miniatus*, but duller, and verging towards yellow.

Latticed, cancellated.

Leg, the *tibia.*

Lenticular, spherically convex on both sides; a depressed double convex figure.

Lepidoptera, an order of insects, of which the wings are four in number, covered by minute imbricated scales; as butterflies and moths.

Leprous, with loose irregular scales.

Ligula, tongue; the superior portion of the *labium;* it is situated beneath the *maxillæ*, generally of a soft texture, often bifid, and frequently coriaceous at base. See *lingula*, *rostellum*, *rostrum*, *haustellum*, *proboscis*, *promuscis*, and *tubus.*

Ligulate, strap-shaped, cut off at top; somewhat linear, and much longer than broad.

Lilacinous, lilac colour; like *violaceous*, but duller, tinged with red.

Limb, the circumference.

Line, the twelfth part of an inch.

Linear, with parallel sides; narrow and nearly of a uniform breadth.

Lineated, lined; streaked; marked with lines.

Lingua, a bivalve, involuted, obtuse and fistulous tongue, composed of two elongated semitubular fillets, which are in reality elongated *maxillæ*, as in the Lepidoptera; the central organ of the *proboscis* in the Hymenoptera constituting a cartilaginous instrument of suction. Fabricius has applied the word *labium* to denote this part, and he again applies the same word to designate the whole *proboscis;* it is "le lévre inferieur" of Degeer.

Linguiform, tongue-shaped; linear with the extremities obtusely rounded.

Literate, ornamented with characters like letters.

Livid, dark gray, verging towards violet.

Longitudinal, the direction of the longest diameter; situated longitudinally with respect to the body.

Lora, small corneous cords upon which the base of the proboscis is seated; these parts seem to be intended to let out or draw in the proboscis; when the latter is projected they point towards the mouth, and when it is retracted they point towards the breast; they are "les leviers" of Reaumur.

Lubricous, covered with a slippery mucous.

Lucid, shining; applied to insects which shine by night, as Lampyris and Fulgora.

Luciferous, giving light.

Lunate, cresent-shaped; formed like a new moon.

Lurid, of a brownish-blue colour.

Luteus, unmixed yellow.

Lyrate, cut into several transverse segments, and gradually enlarging towards the extremity; lyre-shaped.

M.

Macula, a spot larger than a *puncture*, of an indeterminate figure, and of a different colour from the general surface.

Maculated, spotted; marked with spots.

Maerianum, that segment of the *postpectus* situated one on each side behind the *acetabulum* and *parapleurum;* it supports the posterior feet.

Maggot, the *larva;* commonly applied to the immature fly (Musca).

Mandibles, the upper jaws, generally corneous, placed one on each side immediately beneath the *labrum*, and above the *maxillæ*, moving transversely; they are the maxillæ of Kirby, and are destitute of *palpi*.

Manus, the hand; the articulated termination of the anterior feet; the anterior *tarsus*, including *palma*.

Marcescent, shrivelling.

Margin, that portion of a surface which is within the *edge*, bounded on the inner side by the *submargin*, and consisting of a more or less dilated imaginary line.

Marginal cellules, the *radial cellules*.

Marginated, surrounded by an elevated or attenuated margin.

Maxillæ, jaws; one on each side of the mouth immediately beneath the *mandibles*, moving transversely, usually corneous at base, and membranaceous or coriaceous at tip, and furnished with one or two *palpi*.

Maxillary palpi, or *exterior palpi*, articulated moveable filaments near the middle of the dorsal edge of the *maxillæ;* in some Coleoptera there are two pairs, and are then distinguished into *internal* and *external*, the former is biarticulate and incumbent on the back of the *maxilla*.

Members, (artus) the exterior organs of locomotion taken collectively, as well as the appendices of the trunk and abdomen.

Membranaceous, thin, skinny and semitransparent like parchment; of a thin pliable texture.

Meniscoïdal, somewhat globular, with one side concave.

Mentum, the chin; the lowest piece of the mouth, supporting the *ligula* or tongue, and sometimes covering it in front.

Metamorphosis, an alteration in the appearance of an insect, owing to the development of parts previously concealed, by a sudden *vernantia;* the transformation from the imperfect or larva state to the perfect insect; it is *imperfect*, *semicomplete*, or *coarctate*.

Metathorax, the posterior portion of the *stethidium* on the superior surface; it is separated from the thorax and scutel by sutures, and is particularly obvious in the Hymenoptera. See *dorsum*.

Miniatus, red, like red-lead.

Modioliform, somewhat globular, truncated at both ends like the nave of a wheel.

Monadactyle, armed with a moveable nail which closes on the tip; it differs from *chelate* in having but one process.

Monarsenous, that kind of *polygamy* in which one male suffices for many females.

Moniliform, (antennæ) beaded like a necklace. See *aristate* and *perfoliate*.

Monogamous, propagating by the union of one male and one female only.

Monothelious, that kind of *polygamy* in which a female is fecundated by many males.

Mouth, the anterior and terminal part of the head, containing the *trophi*.

Mucronate, terminated in a sharp point. See *cuspidate*.
Muricate, armed with sharp rigid points.
Mystax, in some Diptera, is a patch of bristles or hair, immediately above the mouth, on the lower part of the *hypostoma*, below the *vibrissæ*.

N.

Naked, (pupa) not *folliculated;* (surface) glabrous.
Nasus, the anterior termination of the face, particularly in Hymenoptera, often separated from the *front* by a suture, and often elevated, sometimes gibbous; it is very obvious in Vespa and the kindred genera; it has no relation with the organs of smelling; it supports the *labrum*.
Nail, the *unguis*.
Natatory, (feet) formed for swimming. See *cursory*, *saltatory*.
Navicular, boat-shaped; with a concave disk and elevated margin; *cymbiform*.
Nebulous, clouded; marked with many scattered, abrupt, dilated lines of various forms.
Neck, a contracted posterior termination of the head in some insects.
Nervures, nerves or vein-like processes which support the membranous part of the wings; divided into *radial*, *cubital*, *brachial* and *recurrent*.
Neuroptera, an order of insects, including such as have four finely reticulated wings and no sting, as Dragon-flies, May-flies, &c.
Niger, black, a little tinged with gray.
Nitidus, nearly synonymous with *lucid*, but is less brilliant, and is applied to highly polished surfaces.
Nutant, nodding; the tip bent down towards the horizon.
Nymph, the second state of an insect, from the egg, the members of which are free, or not inclosed with a common integument, as in Grillus. See *chrysalis*, *aurelia*, *pupa*.

O.

Ob, prefixed to a word generally signifies inversely.
Obconic, inversely conic; conic with the vertex pointing downward.
Obcordate, inversely heart-shaped; heart-shaped with the point applied to the base of another object or part.
Oblate, flattened; this term is applied to a spheroid of which the diameter is shortened at two opposite ends.
Oblong, the transverse diameter much shorter than the longitudinal.

Obovate, inversely egg-shaped, the narrow end downwards or towards the base.
Obsolete, indistinct; inconspicuous.
Obtect, (pupa) wrapped in a crustaceous covering.
Obtuse, blunt; ending in a segment of a circle.
Occiput, the hinder part of the head: the part behind the *vertex*.
Ocellate, applied to the eye-like spots on the wings of Lepidopterous insectsus, ually formed of a differently coloured iris or ring, inclosing one or more small spots.
Ocelli, the *stemmata*.
Oculi, the *eyes*.
Ochreous, yellow with a slight tinge of brown.
Onychii, two or three small processes between the *unguis* at the termination of the *tarsus*. See *pulvillus*.
Operculum, a lid; a small valvular appendage.
Opposite, placed on the side opposite to another, so that the bases of the two are on the same transverse line. See *alternate*.
Orbicular, round and flat, the diameters of the plane equal.
Orbit, an imaginary border around the eye.
Order, the subdivision of a class.
Os, the *mouth* and its parts.
Oval, somewhat egg-shaped, but the outlines of the ends are equal. See *ovate*.
Ovate, shaped like the longitudinal section of an egg, the outline of the ends being unequal.
Oviduct, the instrument and appendages with which the female deposits her eggs. See *aculeus*.
Oviposition, the act of depositing eggs; the manner in which eggs are deposited.
Oviparous, propagating by means of eggs.
Ovoviviparous, producing living young, the eggs being disclosed in the matrix of the parent.

P.

Palate, the interior part of the transverse lip.
Pagina inferior, the lower surface of a wing.
Pagina superior, the upper surface of a wing.
Paleaceous, chaffy.
Pallide-flavens, pale or whitish yellow.
Pallidus, of a pale cadaverous hue.
Palma, palm; the basal tarsal joint of the anterior feet, sometimes furnished with *strigilis*. See *manus*.
Palmate, hand-shaped; cut down nearly half-way to the base into subequal, oblong segments, leaving an entire space like the palm of the hand.

Palpi, articulated moveable filaments in the mouth of insects, generally shorter than the antennæ; divided into *labial* and *maxillary palpi.*

Panduriform, fiddle-shaped; oblong, broad at the two extremities, and contracted in the middle.

Papilionaceous, butterfly-like.

Papillary, having the apex semiglobular; somewhat like a nipple; this term ought to be distinguished from *verucose.*

Papillous, pimpled; having the surface covered with raised dots or pimples. See *verucose.*

Pappus, down.

Parallelogram, a quadrilateral, right-lined figure, whose opposite sides are parallel and equal to each other.

Parapleurum, that segment of the *postpectus*, which is situated one on each side of the *acetabulum*, behind the *scapula;* in some genera are two on each side; they may then be distinguished into *anterior* and *posterior.*

Parasitical, inhabiting another animal.

Parietes, walls; perpendicular sides of the honeycomb; sides of elevated bodies.

Patulous, open; spreading.

Pearlaceous, having the appearance of pearl.

Pecten, in Hymenoptera, rigid, incurved setæ which arm the exterior margin of the upper part of the base of the *valvulæ* or *maxillæ.*

Pectinate, comb-shaped; cut into regular straight segments like the teeth of a comb. See *perfoliate*, *setaceous.*

Pectus, the anterior, inferior portion of the trunk, included between the head and *postpectus.*

Pedes, the *feet;* this term is applied to the whole limb, consisting of *femur*, *tibia*, *tarsus.*

Pedicellus, the third joint of the antennæ, particularly in Hymenoptera, often forming the pivot, turning in the socket of the *scapus*, upon which the other articulations, constituting the *apex*, sit, and by means of which they often form an angle with that part; it is "le bouton" of Reaumur.

Pedicle, a *pedicellus.*

Peduncle, a stalk or petiole.

Pedunculated, elevated on a stalk or peduncle.

Peltate, target-shaped.

Pendent, hanging down.

Penicilliform, pencil shaped.

Penis, the genitals of the male, consisting of *forceps* and *phallus.*

Pennaceous, feathered like the web of a quill. See *plumous.*

Penultimate, the last but one.
Perennial, continuing for several years.
Perfoliate, perforated; applied to those antennæ of which the joints are transversely divided into thin plates, which are connected by a common stalk passing nearly through their centres. See *clavate*, *pectinate*.
Peristaethium, that segment of the *postpectus* anterior to the insertion of the intermediate feet; it extends laterally to the *scapulæ*, and is generally connected with the *pectus* by a membrane.
Persistent, permanent.
Personate, gaping.
Petiolated, supported on a stem; (*cellule*) one of the *cubital cellules* is said to be petiolated when it is triangular, and connected by means of a nervure with the nervure of the *radial cellule*; this disposition more frequently occurs in the second cellule.
Petiole, a stem; the support which connects the base of the *metathorax* with the base of the abdomen.
Phallus, the masculine organ of generation.
Phosphorescent, lucid; emitting light in the dark.
Piceous, pitchy; the colour of pitch.
Pilous, having long sparse hairs. See *hirsute*.
Pinnatifid, with winged clefts.
Plane, a level or rectilinear surface, destitute of elevations or depressions; a curved surface cannot be plane because it is not rectilinear. See *equal*.
Planta, the basal joint of the *tarsus* of the posterior pairs of feet in Hymenoptera, often dilated or elongated, containing *scapula*. See *palma*.
Pleura, the side of the *stethidium*, between the *thorax* and *pectus*.
Plicate, plaited; folded like a fan.
Plumous, feathered; with fine hairs on each side so as to resemble a feather. See *pennaceous*.
Poisers, the *halteres*, in the Diptera, a capitate moveable filament on each side, substituted for the inferior wings.
Polliniferous, formed for collecting the pollen of plants, as in many of the Hymenoptera.
Polymorphous, undergoing a *metamorphose*; applied to those articulated animals with feet that undergo a metamorphose, either partial or total. See *homotene*.
Polyphagous, eating a variety of food.
Porcate, marked with raised longitudinal lines.

Porrect, stretched out; prominent; elongated forwards.

Posterior angle, of the wing, is the junction of the *posterior edge* with the *interior edge*; of the *thorax*, is the lateral angle near the base of the elytra.

Posterior edge, the boundary of the *posterior margin*.

Posterior margin, of the wing, extends on the hind part of the wings from the *apex* to the *posterior angle*. See *inner margin*.

Posterior wings, the *inferior wings*.

Postpectus, the posterior portion of the *stethidium* on the inferior surface of the body, consisting of several pieces, which in the Coleoptera particularly are the *peristaethium*, *acetabulum*, *parapleurum*, *scaptula*, and *maerianum*.

Prasinus, grass-green, without any tinge of blue.

Premorse, as if bitten off; with a blunt or jagged termination.

Prismatic, like a prism; of equal thickness and having several flat sides; differs from cylindrical in being angular.

Proculiform, hollow and cylindrical, with a hemispherical base, the sides at top straight and not recurved. See *calathiform*, *cyathiform*.

Proboscis, the inarticulate *trophi* of the Muscæ, and is sometimes soft, labiated and generally retractile, sometimes horny and acute; according to Kirby it is the tongue of the Hymenoptera with all the apparatus, and its *vagina*.

Procumbent, trailing; prostrate; lying flat. See *decumbent*.

Promuscis, according to Illiger, is the *trophi* of the Hymenoptera.

Pruinous, covered with a frosty kind of woolliness; hoary.

Pterigostia, or *wing-bones*, the *nervures*.

Pubescent, coated with very soft, fine wool, hair or down, which is short and not crowded. See *villous*, *tomentous*.

Pulverulent, dusty.

Punctured, marked with small impressed dots. See *scrobiculate*, *variolous*.

Pulvillus, the soft termination of the foot between the *unguis*; it is "un petit mammelon" of Degeer. See *onychii*.

Puniceous, carmine colour.

Pupa, the second state of the insect from the egg, often quiescent; the members being more or less concealed by the common integument. See *aurelia*, *nympha*, *chrysalis*.

Pupil, of an ocellate wing-spot, is the central spot which is surrounded by the *iris*.

Pyriform, pear-shaped.

Q.

Quadrangular, having four angles.
Quadrate, square; somewhat square.
Quadrilateral, having four sides.
Quiescence, a state of *hybernation* somewhat resembling *torpidity*, wherein the animal requires but little nourishment, and exhibits exterior signs of life.

R.

Radial cellule, or *marginal cellule*, a portion of the membrane of the wing, situated near the *apex*, included between the exterior margin and a *nervure* which originates at the *carpus* and passes, with various degrees of curvature, towards the *apex;* it is *complete* when the nervure reaches the apex, and *incomplete* when this member is abbreviated or interrupted, and *appendiculated* when transversely divided by a nervure which does not originate from the *carpus;* when there are two radial cellules the nervure of one of them originates on the basal side of, or below the carpus.
Radiated, furnished with lines which proceed from a common centre. See *stellate.*
Radicula, radicle; the basal joint of the antennæ, attached to the head.
Radius, the first nervure of the *external edge* of the superior wing; it extends from the *base* to the *carpus*, and is separated from the *cubitus* by a membrane.
Ramous, having branches; branched.
Raptatory, formed for seizing a prey.
Reclivate, curved in a convex, then in a concave line.
Recondite, (*aculeus*) concealed within the abdomen, seldom exposed to view.
Rectigrade, larvæ, which having sixteen feet, walk with a rectilinear body. See *geometræ.*
Rectangular, in the form of a right angle; having an angle of ninety degrees.
Rectilinear, right-lined; formed in a straight line.
Recurrent nervures, one or more ascending branches of the *brachial nervures*, which are inserted into the *cubital cellules*, sometimes into the first and second, sometimes into the second and third, at others into one only.
Recurved, bowed backwards.
Reflected, or *reflexed*, bent back rather angularly.
Refracted, bent back as if broken.

Remote, further removed than distant.
Reniform, kidney-shaped.
Repand, wavy; with alternate segments of circles and intervening angles. See *scolloped.*
Replicatile, capable of being folded back.
Resilient, having the property of springing back.
Resupinate, upside down; horizontally reversed.
Reticulate, like net-work.
Retinaculum, horny moveable scales in the Hymenoptera, serving instead of muscles to move the *spicula*, or to prevent it from being darted out too far.
Retracted, opposed to prominent; drawn back.
Retractile, generally exserted, but capable of being drawn in.
Retrorse, (sinuate) pointing backwards; (serrate) inversely serrated.
Retuse, ending in an obtuse sinus, or broad shallow notch; terminated by an obtuse hollow.
Reversed, (wings) deflexed, the margin of the posterior wings projecting beyond that of the anterior wings.
Reviviscence, the awakening from torpidity; the restoration from suspended animation.
Revolute, rolled backwards spirally. See *convolute.*
Rhombus, a quadrangular figure, having its four sides equal and its opposite lines parallel, with two opposite angles acute and two obtuse.
Rhomboid, a figure approaching to a rhombus.
Rigid, inflexible, not easily bending; opposed to limber.
Rimose, full of cracks.
Ringent, gaping.
Roseus, colour of a rose, a pale blood red.
Rostellum, a little bill or beak; it is horny and articulated as in Cimex, &c.; it is the "rostrum" of Latreille. See *rostrum.*
Rostrum, an immoveable prolongation of the head, at the end of which is the mouth, as in the Curculio kind. Latreille applies this term to the *rostellum* of the Cimices.
Rotate, wheel-shaped.
Rudiment, the incomplete formation of a part or organ.
Rufous, reddish.
Rugous, wrinkled; with irregularly waved and elevated lines. See *corrugated.*
Runcinate, notched; cut into several transverse acute segments which point backwards.

S.

Saccate, gibbous or inflated towards one end.

Sagittate, arrow-shaped; triangular, and deeply emarginate at base.

Saltatory, (feet) formed for leaping, the thighs being dilated. See *ambulatory*, *cursory*.

Sanguineous, colour of arterial blood; duller than *puniceous*.

Scabrous, rough like a file, with small raised dots. See *asperous*.

Scale, the *squama*.

Scalloped, (edge) marked or bounded by segments of circles, without intervening angles.

Scapula, that segment that is situated one on each side of the *peristaethium*, on the anterior lateral angle of the *postpectus*, immediately beneath the humeral angle of the elytrum; it is bounded behind by the *parapleurum*.

Scapus, scape; the second articulation of the antennæ, often elongated; it is the "bulbus" of Linné, and "le fuseau" of Degeer.

Scopa, thick hair, covering the posterior tibiæ of some Hymenopterous insects; it is used in collecting and carrying pollen. See *scopula* and *corbicula*.

Scopula, bristles or rigid hairs, in some Hymenopterous insects, covering the inside of the *plantæ*, principally those of the posterior feet; it is very conspicuous in *polleniferous* insects; it is the "scopa" of Schrank, and "la brosse" of Reaumur. See *scopa*, *fimbria*, *flocculus*.

Scriptus, lettered; marked with various characters resembling letters.

Scrobiculated, pitted; having the surface covered with hollows; with deep round pits. See *favose*.

Scrotiform, purse-shaped.

Scutel, or *scutellum*, a small subtriangular portion of the superior surface of an insect, generally separated by a suture from the middle of the base of the thorax.

Scutellar angle, (of the *elytra*) is the angle next to the scutel.

Secund, pointing one way; unilateral.

Securiform, hatchet-shaped; triangular-compressed like the iron part of a hatchet. See *dolabriform*.

Segment, of the abdomen, is a ring or division of that part, and is bounded by sutures or *incisures*.

Semicomplete, (metamorphose) in this kind of change the insect continues active and feeds, as in Grillus. See *coarctate*, *incomplete*.

Semicylindric, flat on one side; the form of the longitudinal half of a cylinder.

Semisagittate, half arrow-shaped; like the longitudinal half of an arrow-head.

Septum, an internal division of a tubular body.

Sericeous, having the surface shining by means of dense, minute, short, silky hair. See *pubescent*.

Serrate, like the teeth of a common saw; differs from *crenate* in having the teeth acute, and from *dentate* in having them directed towards one end, their tips not being opposite to the middle of their base.

Sesquitertial, occupying the fourth part.

Sesquiocellus, or *sesquialter*, a large ocellus including a smaller one.

Sessile, connected immediately with the part from which it originates, without the intervention of a peduncle; (abdomen) attached to the *stethidium* by a considerable part of its whole breadth.

Seta, a bristle.

Setaceous, bristle-shaped; slender and gradually attenuated to the tip. See *capillary*, *filiform*.

Setarious, *aristate*; terminating in a simple naked bristle, as in the antennæ of some of the Diptera.

Setous, bristly, set with bristles.

Sexes, of insects, are distinguished in Entomological works by ♂ (Mars) for male, and ♀ (Venus) female.

Shank, the *tibia*.

Simple, destitute of any remarkable process or appendage; (thighs) equal, not dilated or formed for leaping; (aculeus) having only a single dart or point, not *vaginate*.

Sinuate, indented; cut into deep sinuses.

Sinus, a curvilinear indentation more or less profound; differs from *emargina* in not being angulated; an excavation as if scooped out. See *retuse*.

Solid, this term is applied to the *capitulum* of the antennæ, when the articulations of which it is composed exhibit no interval between them.

Sparse, or *sparsate*, scattered; spread irregularly, and at a distance from each other.

Spatulate, battledoor-shaped; round and broad at top and attenuated at base. See *cuneiform*.

Species, comprehends all the individuals which descend from one another or from a common parentage, and those which resemble them as much as they resemble each other.

Specific character, a character which comprehends all the individuals of a species, and distinguishes them from all others of the same genus.

Spicula, the instrument with which the female lays her eggs. See *vagina*.

Spinous, armed with acute processes or spines.

Spinous-radiate, beset with spines in a circle, either *concatenate*, united at their bases, or *setaceous*, like bristles.

Spinulæ, spinous processes at the base of the tibia, in Hymenopterous insects, including *velum;* they are the "spines" or "spurs" of Degeer, and *heels* of Leach.

Spiracula, *spiracle*, one of the lateral orifices of the trunk and abdomen, through which insects respire; the *stigmata*.

Spiral, revolving obliquely like a corkscrew; or rolled up like a watch-spring.

Spurious, this word is applied to the anterior feet of some of the Lepidoptera, in which these members are destitute of nails and not suitable for walking.

Spurs, the *spinulæ*.

Squama, or *scale*, a small scale above the *halteres* in the Diptera; it is composed of two pieces united at their edges, as in bivalve shells.

Squamula, a very small, corneous, concavo-convex scale, covering the base of the superior wings in some insects.

Squamous, scaly; covered with scales.

Squarrous, scurfy; consisting of rough scales spreading every way, or divided into pieces, standing upright and not parallel with the surface.

Stellate, star-formed; with four or five radiating lines. See *radiated*.

Stemmata, two or three simple, convex, crystalline bodies on the *vertex* of many insects, resembling the eyes of spiders, &c., and probably performing the same functions.

Sternum, a carina or corneous process immersed in, or prominent on the *pectus*, and which extends longitudinally between the anterior feet, often elongated before or behind, or concealed by the base of the anterior feet.

Stethidium, the *trunk;* all that part of the body included between the head and abdomen. See *thorax*.

Stigma, an opake spot on the *costal margin* of the anterior wings, as in some Neuroptera, &c.; it is the "anastomosis" of Kirby, and the "punctum marginale" of Linné. See *carpus*.

Stigmata, the *spiracula*.

Stipes, the stalk or basal portion of the *proboscis*.
Stipitate, supported on a *pedicle*.
Stria, a longitudinal line, often punctured, generally proceeding from the base to the apex of the elytra.
Striate, scored; marked with fine, parallel, impressed, longitudinal lines. See *sulcate*.
Striga, a narrow transverse line. See *fascia*.
Strigilis, a deep sinus near the base of the *palma*; in some Hymenoptera it is often pectinated.
Strigose, clothed with rigid bristles thickest at base. See *hispid*.
Sub, is prefixed to many of the terms used in Entomology, and signifies that the term is not exactly applicable, in its strictly defined sense, to the subject spoken of, but that it must be understood with some latitude; thus *subovate* is somewhat egg-shaped.
Subcutaneous, placed under the skin; applied to larvæ which feed under the skin of animals, or within the substance of the leaf of a plant.
Suberoded, (wings) somewhat indented, but irregularly.
Submargin, an imaginary portion of a surface, situated exterior to the *disk*, and within the *margin*.
Submarginal cellules, the *cubital cellules*.
Subocellate, applied to a spot on the wing of a Lepidopterous Insect, when it resembles an ocellate spot, but is destitute of a pupil; blind.
Subulate, awl-shaped; linear at base and attenuated at the tip.
Sulcated, marked with broad, concave, parallel lines; grooved; furrowed. See *striate*.
Sulphureous, bright yellow; the colour of sulphur.
Superciliary, placed above the eyes.
Superior wings, the anterior or upper pair of wings.

T.

Tail, the terminal segment of the abdomen; an elongation of the tip of the inferior wing in some Lepidoptera.
Tarsus, the small terminal joints of the feet, divided into *planta*, *digitus*; Kirby limits this designation to the terminal joints of the intermediate and posterior pairs of feet; for that of the anterior pair see *manus*; but authors generally have not made this distinction.
Tegmina, wing covers of the Orthoptera; the left laps over the right in Blatta, Phasma, and male Locustæ, and generally in Gryllus and Truxalis—the right over the left in Mantis,

Mantispa, Acheta, Gryllotalpa, and some female Locusta. See *hemelytra*.

Tegula, a small scale, resembling the *squamula* of the Diptera, but more simple and solid, on the base of the superior wings of many insects.

Tendo, one or more bristles attached near the base of the under wing, and passing through the hook (hamus) in many male Lepidoptera; the females often have the *tendo*, but never the *hamus*.

Tentacula, retractile processes on the *larvæ* of some species of Lepidoptera.

Teres, nearly cylindric.

Tergum, the superior portion of the abdomen, separated from the *venter* by lateral sutures, and divided into segments which are perforated each side with the *spiraculæ*.

Terminal, situated at the extremity.

Tessellated, chequered; figured like a chess-board.

Testaceous, tile or brick colour.

Tetragonal, having four corners or angles.

Thigh, the femur; the third joint of the feet.

Thorax, the dorsal portion of the *trunk*, included by the dorsal sutures, and including *tubercula*, *anterior angle*, *posterior angle*, *base*. See *pectus*.

Thyrsus, a cluster.

Tibia, the leg, or fourth joint of the *feet*; it is slender, long, enlarging towards the extremity, which is truncated; including *spinulæ*, *scopa*, and *corbicula*.

Tip, of the *elytra*, is that part which is opposed to the base.

Tomentose, covered with fine hairs so matted together that particular hairs cannot be separated. See *lanate*, *ciliate*.

Tongue, the *ligula* or *lingua*.

Torose, protuberating; swelling into knobs or protuberances.

Torpidity, a state of hybernation in which no exterior signs of life are exhibited. See *quiescence*, *revivescence*.

Tortilis, twisted.

Transverse, the longest diameter placed transversely with respect to the body.

Trapezium, a quadrilateral or four-sided figure, with none of its sides parallel.

Trichotomous, dividing by threes.

Tricuspidate, ending in three points.

Tridactylous, having three toes or claws.

Trigonate, three-cornered.

Triquetrous, three-sided; with three flat sides. See *trigonate*.
Trochanter, the second joint of the *feet*, preceding the *thigh* or *femur;* it is also the second joint of the *apophysis;* it is very prominent in the Carabidæ.
Trochlearis, pulley-shaped; like a cylinder contracted in the middle.
Trophi, instrumenta cibaria; feeders; parts of the mouth taken collectively, composed of five principal parts, viz. *labrum*, *mandibles*, *maxillæ*, *palpi*, *labium*.
Truncate, cut off square at tip. See *emarginate*, *sinus*.
Trunk, or *stethidium*, that part of the body which intervenes between the head and abdomen, including *wings*, *feet*, *thorax*, *pectus*, *epigastrium*.
Tubercle, a little solid pimple.
Tubercula, an elevated triangular process at the anterior angle of the thorax, particularly in Hymenoptera.
Tubulous, formed like a tube; fistulous.
Tubus, a corneous sheath at the base of the *tongue*, including *fulcrum*, *auriculæ*, and *laciniæ*. Fabricius calls it the base of the tongue. Degeer names it "the intermediate piece of the sheath;" Swammerdam also considers it "the sheath of the tongue." Latreille names it "la gaîne."
Tunicate, composed of concentric layers enveloping one another.
Turbinate, top-shaped; nearly conical; it differs from pyriform in being shorter and more suddenly attenuated at base.
Turgid, swollen.

U.

Umbilicate, resembling a navel.
Umbonate, bossed, having an elevated knob in the centre. See *gibbous*.
Uncinate, hooked at the end.
Unequal, opposed to *equal;* differing in length.
Undulated, waved obtusely, without any right lines, but in segments of circles. See *flexuous*.
Unguiculate, armed with a hook or nail.
Unguis, nail or claw, two incurved hooks which terminate the tarsus. See *pulvillus*.
Ungulate, hoof-shaped; like a horse's hoof.
Urceolate, pitcher-shaped; swelling in the middle like a pitcher. See *infundibuliform*, *cyathiform*.
Utriculus, a little bag, or hollow vesicle.

V.

Vagina, every part, the office of which is to cover, defend, or support the tongue—it is divided into *tubus*, *valvæ*, *palpi*, *lora*, and *annulus* (Kirby); the bivalve *coriaceous* sheath or cover of the *spicula*.

Vaginate, (aculeus) inclosed in a bivalve sheath.

Valvæ, or *valvulæ*, in the Hymenoptera, are two coriaceous laminæ or sheaths which surround and inclose the *vagina*, and which support the exterior palpi; small concave membranes inclosing the proboscis; the *maxillæ*.

Variety, a peculiarity of colour or form in an individual, not proper to the species; this difference is sometimes inherited by several successive generations.

Variolous, with large, unequal, impressed points.

Veins, (venæ). See *nervures*.

Velum, membranaceous appendages attached to the *spinulæ* at the apex of the anterior tibiæ.

Venter, the inferior portion of the abdomen, separated from the *tergum* by lateral sutures, and divided into segments.

Ventricose, distended; bellying; inflated.

Vernantia, vernatio; moulting, the shedding of the skin or *exuvia*.

Verrucose, having little hard lumps or wart-like elevations upon the surface. See *papillous*, *apiculate*.

Versatile, vane-like; turning about like a vane.

Vertebral, of or belonging to the vertebra; generally used to indicate spots, lines, or a different shading of colour, &c., immediately over the part corresponding with the vertebral column in a vertebral animal.

Vertex, that part of the face which lies between the *occiput*, *eyes* and *front;* (Diptera) the superior portion of the *front*.

Vertical, perpendicular; at right angles with the horizon. See *erect*.

Verticillate, placed in *whirls*.

Vesicular, beset with prominences that are internally concave, or with little bladders.

Vibratile, this term is used to express the almost continual movement of the antennæ of some Ichneumons and Mutillæ; and of the wings of some Diptera.

Vibrissæ, curved bristles or hairs in some Diptera situated between the *mystax* and the antennæ.

Villi, soft hairs.

Villous, soft haired; clothed with long, soft hair. See *hirsute*, *pubescent*.

Violaceous, violet colour; a mixture of blue and red.

Viscid, covered with a resinous or greasy matter. See *glutinous*.

Vitellinus, yellow, with a slight tinge of red.

Vitta, a longitudinal coloured line.

W.

Whirls, or *whorls*, generally on the antennæ, consisting of small hairs placed round the joints, like spokes round the nave of a wheel. See *verticellate*.

Wing-cells, the *areæ*.

Winglets, small concavo-convex scales generally fringed at tip, placed under the base of the elytra in Dytiscus marginalis.

Wings, membranaceous, reticulated instruments of flight, affixed laterally to the thorax, comprehending superior or anterior, and inferior or posterior wings, *elytra* and *hemelytra*. See *posterior angle*, *nervure*, *stigma*.

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